



**RIDOT TMC Unplanned Incident Statistics and Performance Measures  
Quarterly Report  
10/1/2008 To 12/31/2008**

The Rhode Island transportation system serves 39 cities and towns, encompassing rural, metropolitan, and tourist areas. The Rhode Island Department of Transportation's Transportation Management Center (RIDOT TMC) has been addressing the problem of increasing congestion in Rhode Island by informing the traveler of crashes and unusual delays. In doing so, the TMC has provided measurable benefits to the transportation system, and has developed the technology and institutional awareness necessary to expand the Intelligent Transportation Systems (ITS) Program (called RhodeWays) to the benefit of Rhode Island travelers.

The RIDOT TMC maintains detailed statistics on incidents that we manage from our center. Because the data are entered by our TMC Operators, the statistics are dependent on what we can observe on the roadways with our equipment. Review and compilation of these statistics is part of our ongoing Performance Measurement effort. Through this effort, we are quantifying the benefits of the ITS program in our state, and are also able to monitor improvements in the efficiency and effectiveness with which we manage roadway incidents. By making these statistics available to you on a monthly basis, we hope that you can learn more about the program and understand the benefit of the service we provide to the Rhode Island motoring public.

These periodic reports represent statistics for unplanned incidents on Rhode Island's roadways. The types of incidents included in the report include disabled vehicles, debris on the roadway, emergency roadwork, and vehicle accidents, including jack-knifed trucks and vehicle spinouts. Additionally, a category exists for congestion delays that are outside of typical recurring congestion. The TMC does assist in information dissemination for planned events (such as construction) as well, but those types of events are not included in the statistics. Also, abandoned vehicles are not included since they tend to skew the statistics.

We hope you find this report interesting and that it helps in understanding the significant benefit that the RhodeWays program provides to the people who travel Rhode Island's roadways every day. Also, please remember to check the TMC website frequently for updates (<http://www.tmc.state.ri.us>), including construction and incident information.

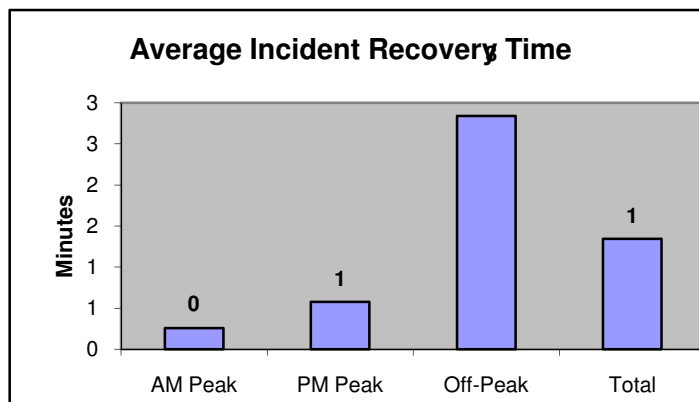
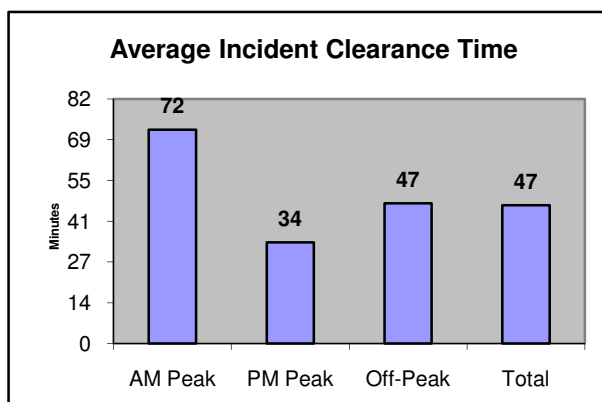
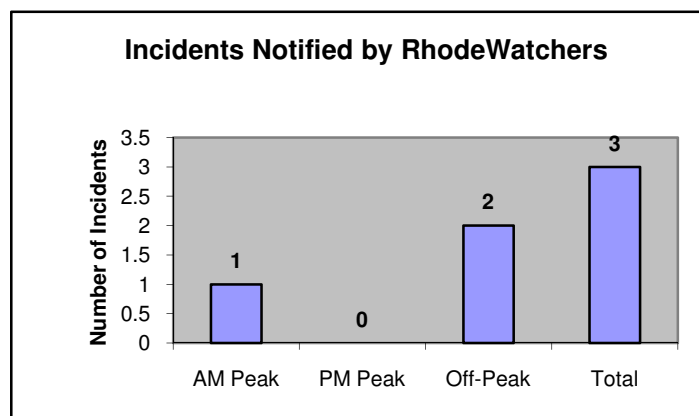
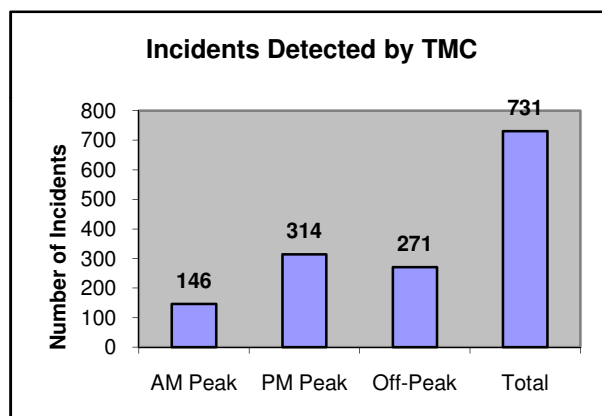
# RIDOT TMC Unplanned Incident Statistics and Performance Measures Report

## 1. Peak Period Incident Statistics\*

	AM Peak	PM Peak	Off-Peak	Total
Number of Incidents	155	332	283	770
Avg. Incident Duration (hr:min)	72	35	50	48
Avg. Incident Clearance Time (hr:min)	72	34	47	47
Avg. Incident Recovery Time (hr:min)	0	1	3	1
# Detected by TMC Operators (CCVE)	70	77	122	269
# Detected by TMC, State Police	76	237	149	462
# Notified by RhodeWatchers	1	0	2	3
# of Messages Posted VMS	14	28	19	61
# of Messages Posted DMS	74	151	149	374
# of Messages Posted HAR	51	52	84	187
# of Messages posted Web	145	310	237	692
Avg. Delay Cost**	\$305,679	\$146,546	\$211,619	\$202,496
Total Delay Cost	\$47,380,217	\$48,653,432	\$59,888,315	\$155,921,964

\* AM Peak: 6:00AM to 10:00 AM, PM Peak: 3:00PM to 7:00PM, Monday - Friday

\*\* Delay Cost is a function of incident duration, volume on the roadway, delay per person, and cost per hour of delay for both commercial and personal vehicles. Average delay cost includes only incidents with a lane blockage and represents average cost per incident.



Note: Statistics in this report are only for incidents that the TMC reported or responded to. They do not include all incidents that occurred on Rhode Island roadways

**Incident Clearance Time** is the time from the start of an incident (or when it is detected) to the time it is cleared from the roadway.

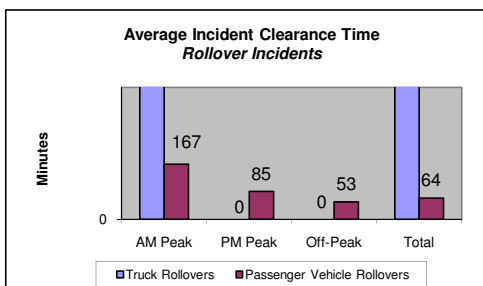
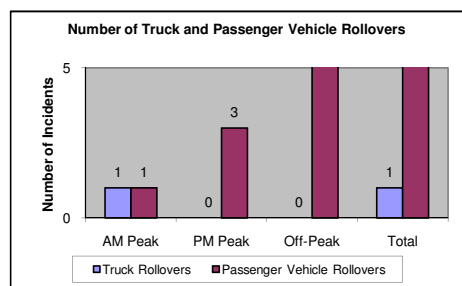
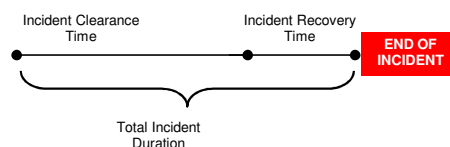
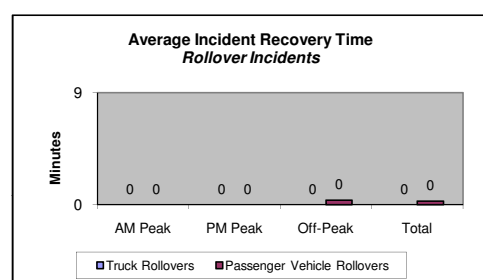
**Incident Recovery Time** is the time it takes for the roadway to be rid of residual delay following incident clearance. It is based on TMC Operator observation.



## 2. Rollover Incident Statistics\*

VEHICLES	Trucks				Automobiles			
	AM Peak	PM Peak	Off-Peak	Total	AM Peak	PM Peak	Off-Peak	Total
No. of Rollovers	1	0	0	1	1	3	14	18
Avg. Incident Duration (min)	4700	0	0	4700	167	85	53	65
Avg. Incident Clearance Time (min)	4700	0	0	4700	167	85	53	64
Avg. Incident Recovery Time (min)	0	0	0	0	0	0	0	0

\* AM Peak: 6:00AM to 10:00 AM, PM Peak: 3:00PM to 7:00PM, Monday - Friday

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### 3. Incidents by Severity Level

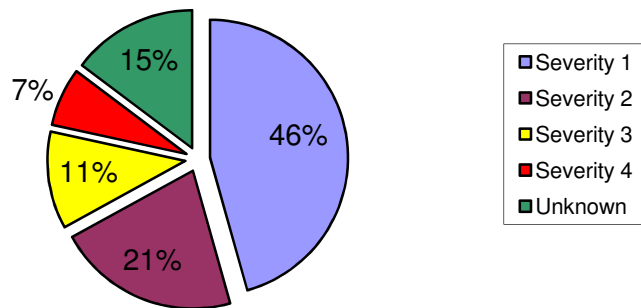
Severity Level*	No. of Incidents
Severity 0	288
Severity 1	220
Severity 2	103
Severity 3	55
Severity 4	33
Unknown	71
<b>Total</b>	<b>770</b>

Number of Incidents with a Secondary Incident:

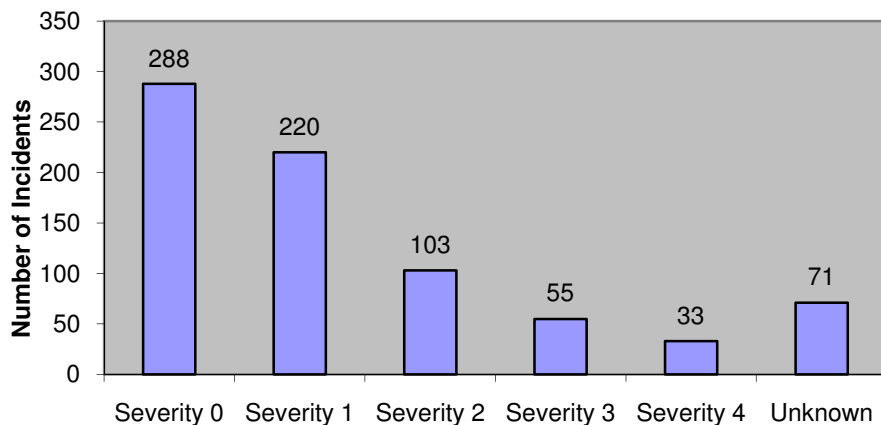
Percentage of Incidents with a Secondary Incident:

Note: A "secondary" incident is one that is the result of an earlier incident.

**Percent of Incidents by Severity Level**



**Number of Incidents by Severity Level**



#### \*Definition of Incident Severity Levels:

*Severity 0:* No injuries and no travel lanes blocked

*Severity 1:* 1/4+ travel lanes blocked with no injuries OR median/shoulder closed with injuries

*Severity 2:* 1/3 or 2/4+ lanes blocked OR Fire w/ 0 lanes closed OR Hazmat w/ 0 lanes closed

*Severity 3:* 1/2 or 2/3 or 3/4+ lanes blocked OR Fire w/ 1/3 or 2/4 lanes closed OR

Hazmat w/ 2/4 lanes closed

*Severity 4:* All travel lanes blocked OR fatality OR Hazmat w/ clean-up OR Fire w/ 1/2, 2/3, 3/4 lanes closed

OR Structural damage w/ 1/3, 2/3+ lanes closed

*Unknown:* Incidents without a recorded severity level

Note: For travel lanes blocked terminology, "1/4" indicates 1 out of 4 lanes blocked

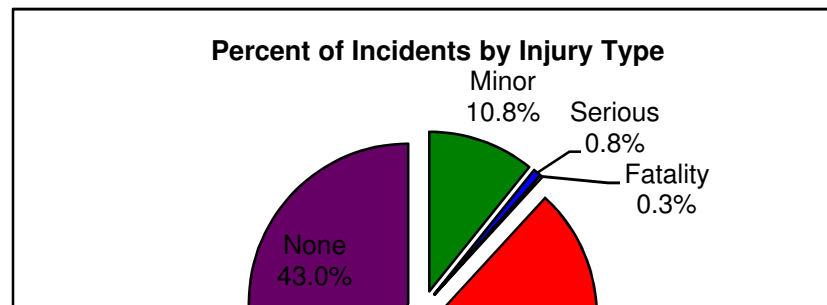
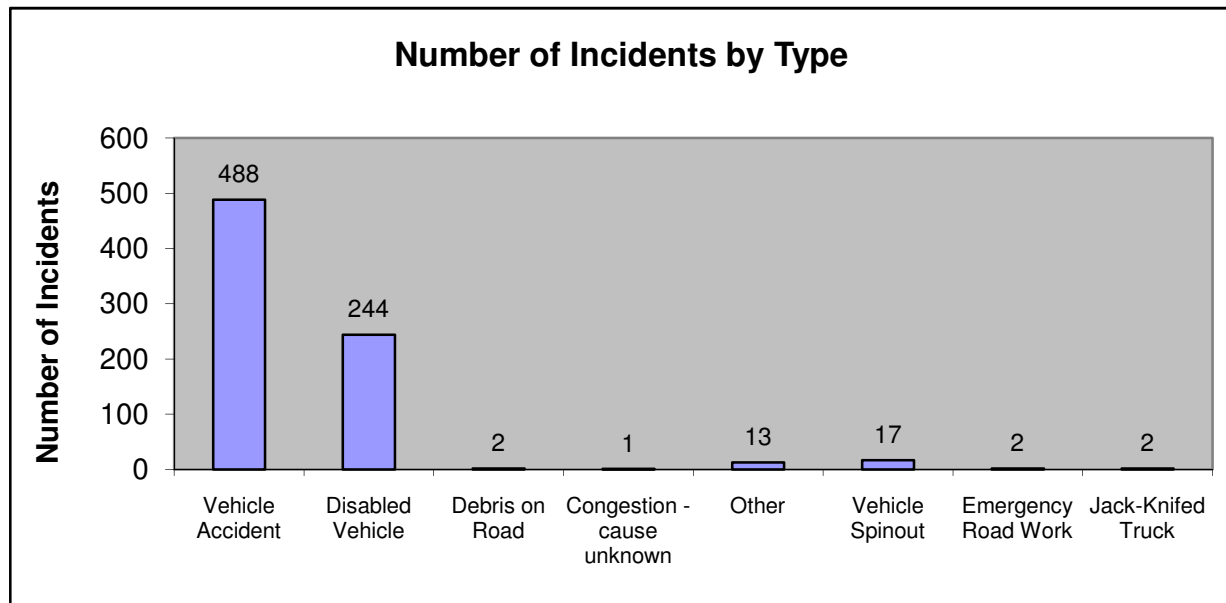


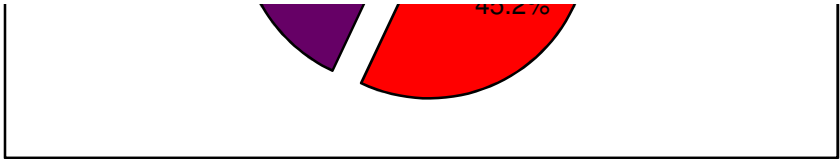
#### 4. Incidents by Type

Incident Type	No. of Incidents
Vehicle Accident	488
Disabled Vehicle	244
Debris on Road	2
Congestion - cause unknown	1
Other	13
Vehicle Spinout	17
Emergency Road Work	2
Jack-Knifed Truck	2
<i>Total Number of Incidents</i>	<i>769</i>

#### 5. Incidents by Injury Type

Injury Type	No. of Incidents
Minor	83
Serious	6
Fatality	2
Unknown	348
None	331
<i>Total</i>	<i>770</i>





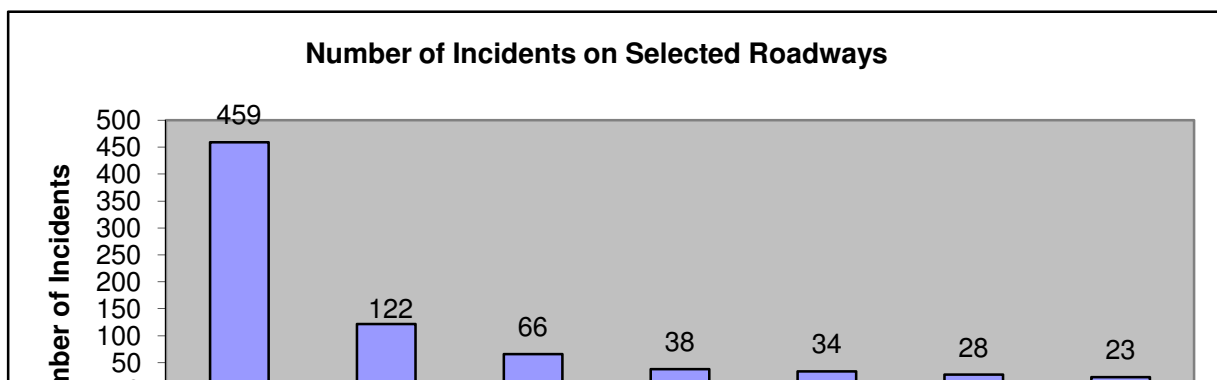
## 6. Incidents by Pavement and Weather Conditions

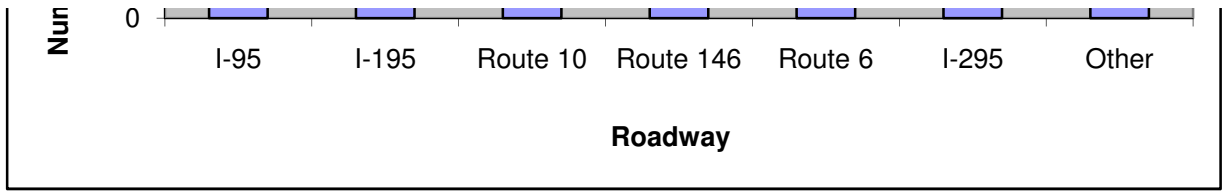
<b>Pavement Condition</b>	<b>No. of Incidents</b>
Dry	509
Wet	212
Icy	11
Snow-Covered	38
Flooded	0
Other	0
<i>Total</i>	<i>770</i>
<b>Precipitation</b>	
None	575
Light-moderate rain falling	143
Heavy rain falling	13
Light-moderate sleet falling	1
Heavy sleet falling	1
Light-moderate snow falling	17
Heavy snow falling	20
<i>Total</i>	<i>770</i>
<b>Wind</b>	
Calm to Moderate	704
Moderate to Strong	64
Gusts over 50 mph	0
Gusts over 75 mph	0
Hurricane	0
Other	2
N/A	0
<i>Total</i>	<i>770</i>
<b>Visibility</b>	
Clear	597
Light fog	22
Dense fog	0
Reduced- rain	106
Reduced-snow	19
Poor-heavy rain/sleet	8
Poor-heavy snow	16
Reduced-smoke	0
Other	1
N/A	1
<i>Total</i>	<i>770</i>

## 7. Incidents Detected by Primary Notifier on Selected Roadways

Roadway	Primary Notifier	No. of Incidents
I-195	TMC Operator	44
	State Police Scanner	31
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	2
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	45
	<b>Total</b>	<b>122</b>
I-95	TMC Operator	181
	State Police Scanner	111
	Local Fire Department	2
	Rhode Watcher	2
	Media/MetroNetworks	2
	Traffic.com	0
	TMC State Police	0
	Transcom	2
	Other	159
	<b>Total</b>	<b>459</b>
I-295	TMC Operator	3
	State Police Scanner	12
	Local Fire Department	0
	Rhode Watcher	1
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	12
	<b>Total</b>	<b>28</b>

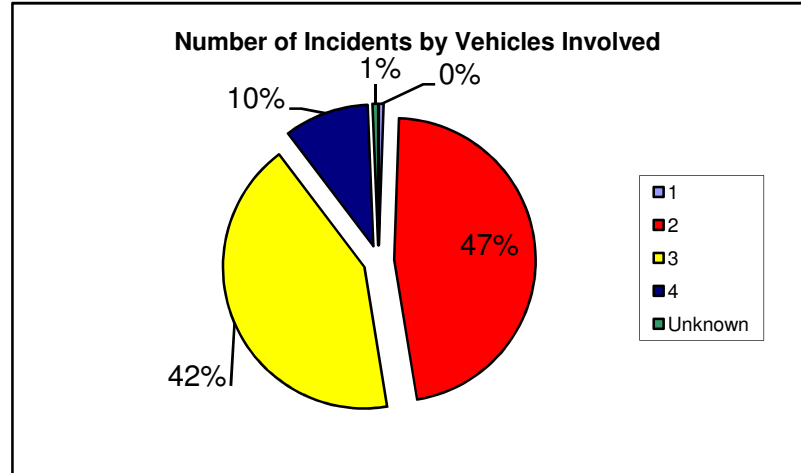
Roadway	Primary Notifier	No. of Incidents
Route 10	TMC Operator	21
	State Police Scanner	22
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	1
	TMC State Police	0
	Transcom	0
	Other	22
	<b>Total</b>	<b>66</b>
Route 146	TMC Operator	10
	State Police Scanner	9
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	19
	<b>Total</b>	<b>38</b>
Route 6	TMC Operator	9
	State Police Scanner	9
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	1
	Traffic.com	0
	TMC State Police	0
	Transcom	1
	Other	15
	<b>Total</b>	<b>35</b>





## 8. Incidents by Number of Vehicles Involved

No. of Vehicles Involved	No. of Incidents
1	4
2	354
3	319
4	73
5	13
6	2
7	0
8	0
9	0
10+	0
Unknown	5
<b>Total Incidents</b>	<b>770</b>

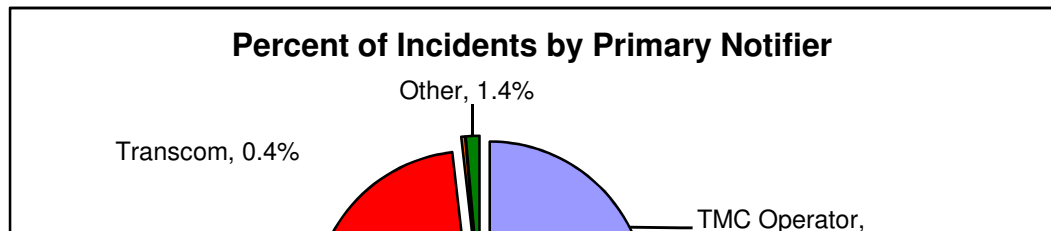


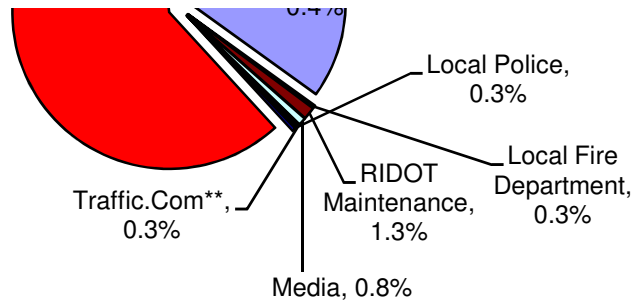
## 9. Incident Notification

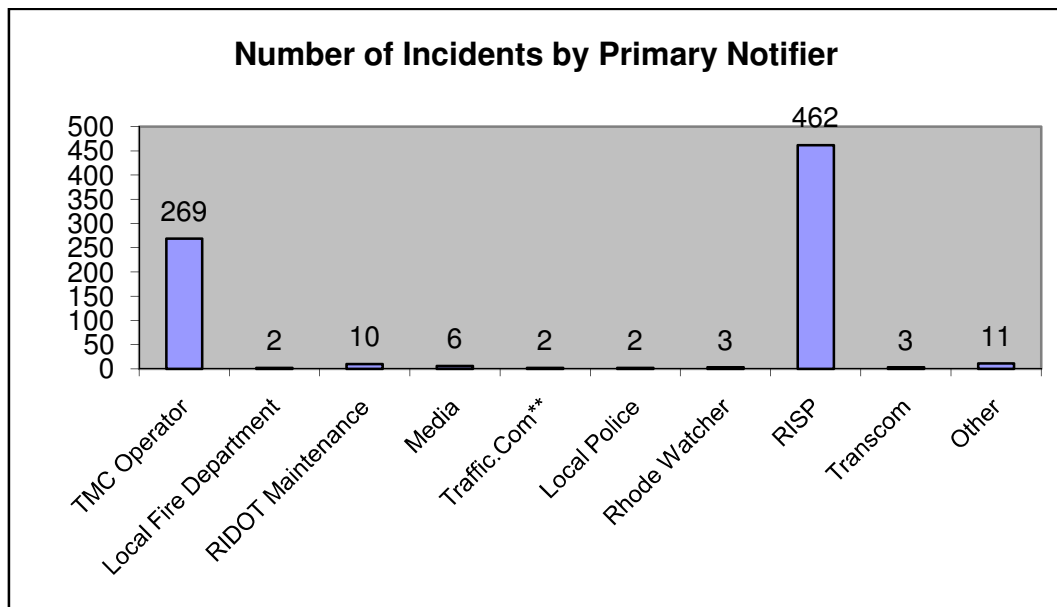
Primary Notifier*	No. of Incidents
TMC Operator	269
Local Fire Department	2
RIDOT Maintenance	10
Media	6
Traffic.Com**	2
Local Police	2
Rhode Watcher	3
RISP	462
Transcom	3
Other	11
<b>Total</b>	<b>770</b>

\*First notifier of the incident to TMC

\*\*Formerly Mobility Technologies

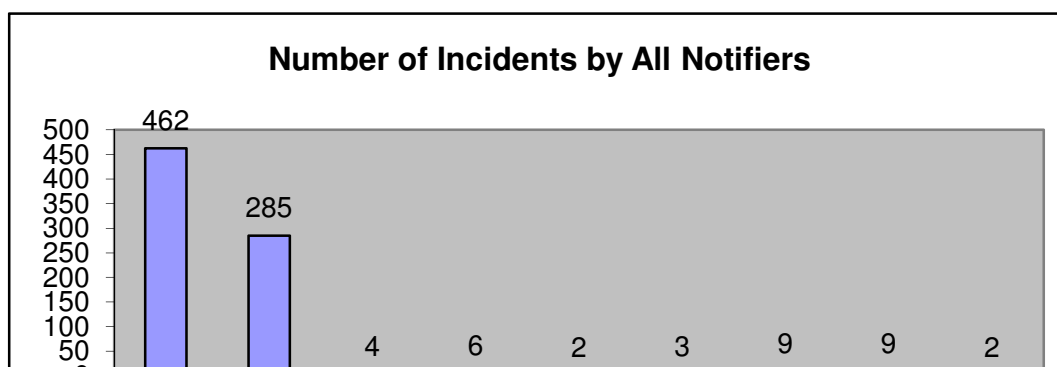


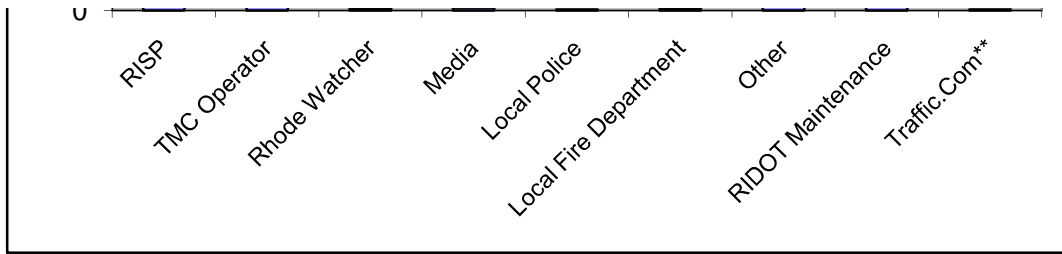




Notifier	No. of Incidents
RISP	462
TMC Operator	285
Rhode Watcher	4
Media	6
Local Police	2
Local Fire Department	3
Other	9
RIDOT Maintenance	9
Traffic.Com**	2
Transcom	3

*Note: Primary notifier indicates the first notifier of the incident to the TMC. Additional notifiers are also logged, and are represented in the statistics for "all notifiers".*





## 10. Incident Response

On-Scene Responding Agency	No. of Incidents	Percent of Total Incidents
State Police	641	83.25%
Tow	236	30.65%
Local Fire Department	149	19.35%
EMS	145	18.83%
Local Police	47	6.10%
Service Patrol	24	3.12%
Mass Highway	1	0.13%
DOT	15	1.95%
Hazmat	2	0.26%
DEM	1	0.13%
Connecticut DOT	0	0.00%
Construction	0	0.00%
Coast Guard	0	0.00%
Department of Health	1	0.13%
K-9	0	0.00%
RIPTA	0	0.00%

	# of Incidents
# Involved Equipment(HAR,VMS or CCVE)	414
# of VMS Messages	61
# of DMS Messages	374
# of HAR Messages	187
# of Web Messages	692

*Note: Numbers and percentages in upper table indicate how many of the incidents during the month were responded to by the agency indicated. Note that multiple agencies may respond to an incident, so percentages do not add up to 100%.*

